

WARRANTY / DISCLAIMER

The designs represented in these plans are in accordance with established practices of civil engineering. However, neither Swenson, Hagen & Co. nor its personnel can or do warrant these plans as constructed except in the specific cases where Swenson, Hagen & Co. personnel inspect and control the physical construction on a full time basis.

SAFETY NOTICE TO CONTRACTOR

In accordance with generally accepted construction practices the contractor will be solely and completely responsible for conditions of the job site, including safety of all persons and property during performance of the work. This requirement will apply continuously and not be limited to normal business hours.

NOTICE TO CONTRACTOR

The location of existing underground utilities are shown in an approximate way only and have not been independently verified by the owner or its representatives. The Contractor shall determine the exact location of all existing utilities before commencing work, and agrees to be fully responsible for any and all damages which might be occasioned by the Contractor's failure to exactly locate and preserve any and all underground utilities.

CALL BEFORE YOU DIG
NORTH DAKOTA
UTILITIES UNDERGROUND LOCATION SERVICE
1-800-795-0555



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Surveying
Hydrology
Land Planning
Civil Engineering
Landscape & Site Design
Construction Management

GENERAL LANDSCAPING NOTES FOR ALL SHEETS

- 1. ALL CONTRACTORS WISHING TO SUBMIT BIDS FOR THIS LANDSCAPING PROJECT SHALL BE RESPONSIBLE FOR FIELD VERIFYING ALL CONDITIONS.
- 2. PROTECT THE IMPROVEMENTS ON SITE AND ON THE ADJOINING PROPERTIES. PROVIDE BARRICADES, COVERINGS OR OTHER TYPE OF PROTECTION AS NECESSARY TO PREVENT DAMAGE AND TO SAFEGUARD AGAINST INJURY TO EXISTING UTILITIES.
- 3. DAMAGE THAT OCCURS TO PLANTS DURING TRANSPORTATION AND INSTALLATION WILL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR.
- 4. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING AND CARING FOR ALL PLANT MATERIAL, SEED, AND OTHER LANDSCAPING IMPROVEMENTS UNTIL THE DATE OF FINAL INSPECTION AND APPROVAL.
- 5. PLANTING BEDS SHALL BE INSTALLED WITH 3" OF 1" CRUSHED ROCK MULCH WITH COMMERCIAL GRADE LANDSCAPE FABRIC UNDERLAYMENT HAVING A THICKNESS OF AT LEAST 4 MIL. BEDS SHALL BE EDGED WITH 6" COMMERCIAL GRADE BLACK PLASTIC EDGING.
- 6. SOLITARY TREES DO NOT NEED TO BE EDGED AROUND, HOWEVER ORGANIC WOOD MULCH SHALL BE PLACED AROUND THE TREE IN A MUTTLE RING THAT CONFORMS TO THE DETAIL PROVIDED FOR TREE PLANTINGS.
- 7. CONTRACTOR SHALL PROVIDE WRITTEN WARRANTIES CONFIRMING THE FOLLOWING:
FURNISHED TREES GUARANTEED TO LIVE AND REMAIN STRONG, VIGOROUS, AND HEALTHY CONDITION FOR 365 DAYS MINIMUM FROM DATE LANDSCAPE INSTALLATION IS ACCEPTED AS COMPLETED.

IRRIGATION PERFORMANCE SPECIFICATION

- 1. CONTRACTOR SHALL TAKE AN INVENTORY OF THE EXISTING IRRIGATION SYSTEM AND PROVIDE A PLAN AND BID TO EXPAND UPON THE EXISTING IRRIGATION SYSTEM WHILE CONFORMING TO THE FOLLOWING PERFORMANCE SPECIFICATIONS.
- 2. ALL MAINLINES SHALL BE 2" CLASS 160 PVC. LATERAL LINES SHALL BE 100# POLYETHYLENE TUBING. ALL LINES TO BE RUN BENEATH IMPERVIOUS SURFACING SHALL BE INSTALLED INSIDE OF CLASS 35 PVC CONDUITS THAT ARE TWICE THE DIAMETER OF THE IRRIGATION LINE. VALVES SHALL BE RAINBIRD PEB OR HUNTER PGV. RAINBIRD LANDSCAPE DRIPLINE (LD-09-12) SHALL BE USED IN PLANTING BEDS WITH AN APPROPRIATE LANDSCAPE DRIP ZONE VALVE. ALL POP-UP SPRAY HEADS SHALL BE RAINBIRD 1804'S. ALL ROTORS SHALL BE RAINBIRD 5000'S OR HUNTER PGP'S. AT LEAST 3 EACH 2" GATE VALVES SHALL BE USED TO ISOLATE VARIOUS PORTIONS OF THE SYSTEM. ALL VALVES SHALL BE STORED INSIDE OF APPROPRIATELY SIZED NDS OR HUNTER VALVE BOXES.
- 3. SYSTEM SHALL BE DESIGNED FOR 100% HEAD TO HEAD COVERAGE PROVIDING AT LEAST 1" OF MOISTURE PER WEEK. OVERSPRAY SHALL BE MINIMIZED ONTO PAVEMENT, SIDEWALKS, AND BUILDINGS. QUICK COUPLERS SHALL BE PROVIDED FOR WINTERIZATION.
- 4. IRRIGATION CONTRACTOR SHALL MAKE ANY FIELD ADJUSTMENTS NECESSARY TO INSURE THAT THE COVERAGE IS HEAD TO HEAD. ALL CHANGES MUST BE DOCUMENTED. UPON COMPLETION OF THE JOB AN AS BUILT DRAWING INCLUDING PIPE SIZES, VALVE LOCATIONS AND HEAD LOCATIONS MUST BE GIVEN TO THE OWNER OR OWNER'S REPRESENTATIVE.
- 5. IRRIGATION CONTRACTOR SHALL FOLLOW ALL RECOMMENDED PRACTICES AS SET FORTH BY THE MANUFACTURER'S AND THE IRRIGATION ASSOCIATION.

TOPSOIL NOTES

- 1. ALL PORTIONS OF THE SITE NOT RECEIVING CONCRETE, CURB & GUTTER OR OTHER IMPROVEMENTS SHALL BE COVERED WITH A MINIMUM OF 6" OF TOPSOIL AND SEEDED ACCORDING TO SPECIFICATIONS.
- 2. ALL IMPORTED TOPSOIL SHALL BE NATURAL, FRIABLE, FERTILE, FINE, SANDY-LOAM TOPSOIL. IT SHALL BE FREE FROM SUBSOIL, NOXIOUS WEEDS, STONES, LIME, CEMENT, ASHES, SLAG, OR OTHER DELETERIOUS MATTER.
- 3. TOPSOIL SHALL BE PLACED AND SEEDED AS SOON AS PRACTICAL TO MINIMIZE WIND AND WATER EROSION. BACKFILL BEHIND CURB AND GUTTERS AND SIDEWALK AS SOON AS REASONABLE TO PREVENT STANDING WATER AND PROTECT THE IMPROVEMENTS.

SEEDING NOTES

- 1. ALL PORTIONS OF THE SITE THAT HAVE BEEN DISTURBED DURING CONSTRUCTION AND ARE NOT RECEIVING OTHER IMPROVEMENTS SHALL BE SEEDED. SEED SHALL CONFORM TO THE CITY OF BISMARCK SPECIFICATIONS FOR MUNICIPAL IMPROVEMENTS. SEED MIX SHALL BE CLASS II SEED.
- 2. ALL PORTIONS OF THE SITE THAT ARE TO BE SEEDED SHALL BE HYDROMULCHED. HYDROMULCH SHALL BE A WOOD CELLULOSE FIBER MULCH THAT CONFORMS TO THE CITY OF BISMARCK'S SPECIFICATIONS. APPLICATION METHODS, APPLICATION RATES, MULCH MIX CONTENTS, AND ALL OTHER PERTINENT SPECIFICATIONS RELATED TO HYDROMULCH SHALL CONFORM TO THE CITY OF BISMARCK'S SPECIFICATIONS.

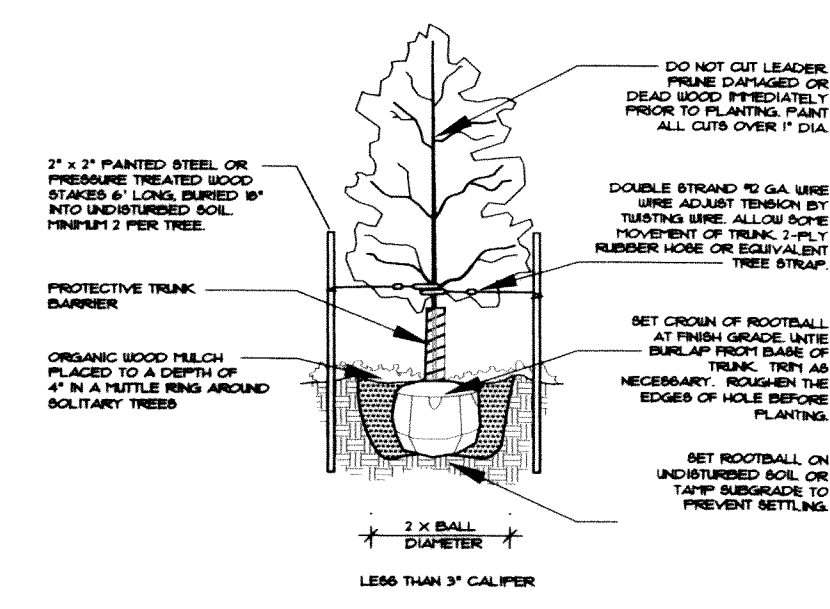
PLANT PALETTE

SYM.	COMMON NAME	SCIENTIFIC NAME	SIZE	QNTY.
AM	AMUR MAPLE	Acer ginnala	1" Cal.	6
BO	BUR OAK	Quercus macrocarpa	2" Cal.	15
SM	SILVER MAPLE	Acer saccharinum	2" Cal.	1
DK	DWARF KOREAN LILAC	Syringa meyeri	2 Gallon	34

I hereby certify that this plan specification, or report was prepared by me or under my direct supervision, and that I am a duly Registered Landscape Architect under the laws of the State of North Dakota.

JACOB L. AXTMAN, ASLA
Date 3-9-11 Ref. No. 35

THIS DOCUMENT WAS ORIGINALLY SEALED BY JACOB L. AXTMAN, ASLA AND THE ORIGINAL DOCUMENT IS STORED AT THE OFFICE OF SWENSON, HAGEN & CO. P.C.



TREE PLANTING DETAIL
TYPICAL FOR ALL DECIDUOUS, SINGLE TRUNK TREES

LEGEND

- EXISTING CB & GTR
- EXISTING WATER MAIN
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- EXISTING CONCRETE
- EXISTING ASPHALT
- EXISTING STREET LIGHT
- EXISTING TREE
- EXISTING SPOT GRADE
- CONSTRUCTION LIMITS
- PROPOSED CB & GTR
- PROPOSED 5" ASPHALT
- PROPOSED REMOVAL AREA
- PROPOSED CONCRETE
- PROPOSED STORM SEWER
- PROPOSED CONTOUR

PROJECT NO. 1002
DRAWING NO. 1002
CHECKED BY M.B.
DATE 3-9-2011
REVISION

JIRAN ARCHITECTS & PLANNERS P.C.
BOX 5015 1431 INTERSTATE LOOP SUITE A BISMARCK, ND 58502
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LANDSCAPING PLAN
LOT 1 BLOCK 1 LESS LOT A OF LOT 1
MIRIAM INDUSTRIAL PARK THIRD ADDITION

BIS-MAN TRANSIT ADDITION #02
CAPITAL AREA TRANSIT
BISMARCK, NORTH DAKOTA

C 3.0